No.



9800326

THE UNIVERD SHAVES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

NDSH Research Joundation

THE THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXPIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT (S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT (S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC EPIENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE HIT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR KITING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL CONFORM TO THE NUMBER OF THE PLANT VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET.SEO.)

SOYBEAN

'Norpro'

In Jestimonn Murreof, I have hereunto set my hand and caused the seal of the Hant Anriety Hrotection Office to be affixed at the City of Washington, D.C. this fifth day of Tebruary, in the year Lar Lord two thousand one.

Secretary of Agriculture

Situsi:
Clum Rfort
Seting Commissioner

Acting Commissioner Plant Variety Protection Office Agricultural Marketing Sorvice

REPRODUCE LOCALLY. Include form number and date on all	reproductions.		FORM APPROVED - OMB NO. 0581-0055			
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTEC	TION OFFICE	The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.				
APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICAT						
(Instructions and information collection burden stateme	nt on reverse)	until certificate is issued (7 U.S.C	. 2426).			
NAME OF APPLICANT(S) (as it is to appear on the Certificate)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME			
NDSU Research Foundation	i i	ND92-1111	Norpro			
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Count	ועדל	5. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY			
c/o Executive Director PO Box 5014		701-231-8931	9800326			
Fargo, ND 58105-5014		8. FAX finclude area codel	F DATE			
,		701-231-1013	6/17/58			
7. GENUS AND SPECIES NAME	8. FAMILY NAME (Bot	anical)	G FIUNG AND EXAMINATION FEE:			
Glycine max	Legumina		F = 2,460			
9. CROP KIND NAME (Common name)	I		B DATE N7 178			
Soybean			E			
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION NDSU Research Foundation - 501(c) 3	TION <i>(corporation, partile</i> Corporation	rship, association, etc.) (Common name)	c CERTIFICATION FEE:			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION North Dakota	I. IF INCORPORATED, GIVE STATE OF INCORPORATION 12. DATE OF INCORPORATION					
	ve in this application Zetocha	N AND RECEIVE ALL PAPERS	14. TELEPHONE (include area code)			
	cutive Direc		701-231-8136			
North Dakota State University NDS	15. FAX (include area code)					
Fargo, ND 58105-5051 POTE						
	o, ND 58105	-5014	701-231-8474			
 CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow in a. X Exhibit A. Origin and Breeding History of the Variety 	structions on reverse)					
b. X Exhibit B. Statement of Distinctness						
c. 🔀 Exhibit C. Objective Description of the Variety						
d. Exhibit D. Additional Description of the Variety (Optional)						
e. 🔀 Exhibit E. Statement of the Basis of the Applicant's Ownership						
f. X Voucher Sample (2,500 viable untreated seeds or, for tuber propagated	d varieties verification the	of tissue culture will be deposited and maintain	ned in an approved public repository!			
g. 🔀 Filing and Examination Fee (\$2,450), made payable to "Treasurer of th						
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY Y		S A CLASS OF CERTIFIED SEED? (See Sect	ion 83(a) of the Plant Variety Protection Act)			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED A			S OF PRODUCTION BEYOND BREEDER SEED?			
GENERATIONS? ☐ YES 🛣 NO		☐ FOUNDATION ☐ REGISTER	_			
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN REL	EASED, USED, OFFERED	FOR SALE, OR MARKETED IN THE U.S. OR	OTHER COUNTRIES?			
W YES III 'yes,' give names of countries and dates) U.S.A release date April 29, 1998	NO SERVE	de AM of the American				
21. The applicant(s) declare that a viable sample of basic seed of the variety will be applicable, or for a tuber propagated variety a tissue culture will be deposited in	furnished with application	n and will be replenished upon request in acc maintained for the duration of the certificate,	ordance with such regulations as may be			
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or Section 42, and is entitled to protection under the provisions of Section 42 of the	tuber propagated plant vi	ariety, and believe(s) that the variety is new.	distinct, uniform, and stable as required in			
Applicant(s) is(are) informed that false representation herein can jeopardize protein	ection and result in penal	ties.	·			
SIGNATURE OF APPLICANT (OWNER'S)	SIGNA	TURE OF APPLICANT (Owner(s))				
NAME (Please print or type)	NAME	(Please print or type)				
Dale Zetocha		· · · · · · · · · · · · · · · · · · ·				
CAPACITY OR TITLE Executive Director DATE 6	6/98 CAPAC	CITY OR TITLE	DATE			
STD-470 (03-96) (Previous editions are to be destroyed)	0,70	(See reverse for instructions and	information collection burden statement			

Exhibit A

Origin and Breeding History of the Variety NORPRO

Norpro, tested as ND no., 92-1111, was derived from the cross Ozzie/Proto, made in 1989. Ozzie and Proto are released cultivars developed by the University of Minnesota, St. Paul. The cross was made in the summer of 1989 in Fargo, ND. The F_1 plant was grown during the winter of 1989-1990 in Chile, S.A. The F_2 population was grown in the summer of 1990 and advanced to the F_3 generation by the single-pod-bulk method. The F_3 population was grown in the Chile winter nursery. The F_4 population was grown in 1991 in Fargo, ND. F_4 plants from the segregating population were individually threshed in the fall of 1991 and $F_{4:5}$ plant rows were selected in 1992. ND92-1111 was first tested in replicated yield trials in 1993. Norpro was evaluated in the Uniform Regional Soybean Tests: Northern States as a Maturity Group 0 experimental line in 1996 and 1997. Individual F_{5.8} plants were threshed in 1995 and 50 single plant selections were evaluated for uniformity in the winter of of 1995-1996 at Los Andes, Chile, S.A.. These 50 purification rows were individually harvested and bulked after evaluation of hilum color, plant maturity, flower color, plant height, pubescence color, seed coat luster, and pod color. Breeder seed of ND92-1111 was increased in the summer of 1996. In the summer of 1997

the Foundation seed of ND92-1111 was increased at Casselton, ND. Norpro was released April 29, 1998 as an F_{12} generation pure line soybean cultivar and is uniform and stable within commercially acceptable limits. As is true with other soybean cultivars, a small percentage of F_{12} and F_{13} and F_{13} are considered within commercially acceptable limits for almost any characteristic during the course of repeated multiplication.

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nedy Ki

Exhibit B

Novelty Statement

- 1. Norpro was developed primarily for increased yield, suitable maturity for North Dakota, and desirable tofu manufacturing characteristics. Norpro is morphologically different from both parents. Differences exist between certain high molecular weight proteins of Norpro compared to the parental lines Ozzie and Proto in electrophoresis isozme gels. Photographs of isozyme gels labelled Photo #1, #2, #3 are submitted as attachments to this application. In these three gels, Norpro can be distinquished from the two parents (Ozzie, Proto).
 - a. PHOTO #1 HyPure Gel PGM
 - b. PHOTO #2 HyPure Gel ACP
 - c. PHOTO #3 HyPure Gel PHI
- 2. Norpro is most similar to the cultivar Proto. However, Norpro can be distinguished from Proto by hila color. Norpro has yellow hila and Proto has buff hila.

USDA-AT

EXHIBIT (

Page 1 of 4

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MA TING SERVICE
LIVESTOCK, MEAT, OR ARE
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycing max 1.1

SOY	BEAN (Glycine max L.)		
NAME OF APPLICANT(S)	TEMPORARY DESIGNA	TION VARIETY NAME	
Theodore C. Helms	ND92-1111	Norpro	
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip	Codel		
P.O. Box 5051	Casey	FOR OF	FICIAL USE ONLY
Fargo, ND 58105-5051		PVPO NUMBER 98(0326
1 = Spherical (L/W, L/T, and T/W ratios = < 1.2) 3 = Elongate (L/T ratio > 1.2; T/W = < 1.2) * 2. SEED COAT COLOR: (Mature Seed) 1	dequate soybean variety desc T 2 = Spherical Flatte 4 = Elongate Flatte	ibed below. When the s	number of significant digit less (e.g., 0 9). The should be described the stripe of
1 8 Grams per 100 seeds ★ 5. HILUM COLOR: (Mature Seed)			
2 1 = Buff 2 = Yellow 3 = Brown	4 = Gray 5 = Imperfect	Black 6 = Black	7 = Other (Specify)
★ 6. COTYLEDON COLOR: (Mature Seed)			
I 1 = Yellow 2 = Green	in the second of		-
★ 7. SEED PROTEIN PEROXIDASE ACTIVITY:	CO ST.		
2 1 = Low 2 = High	<u>Énziby</u> Asilombis va		
* 8. SEED PROTEIN ELECTROPHORETIC BAND:	A & Control of the Co		
1 = Type A (SP1 ^a) 2 = Type B (SP1 ^b)			
★ 9. HYPOCOTYL COLOR:			_
1.5 Company 415	h bronze band below cotyledons 'Coker Hampton 266A')	('Woodworth'; 'Tracy')	
2 1 = Lanceolate 2 = Oval 3 = Ovate	4 = Other (Specify)		

FORM LMGS-470-57 (6-83)

(Edition of 2-82 is obsolete.)

2 = Medium ('Corsoy 79'; 'Gasoy 17')	9800326
2 = Medium Green ('Corsoy 79'; 'Braxton')	
3 = White with purple throat	
3 = Black	·
2 = Intermediate ('Amcor'; 'Braxton')	
2 = Semi-Determinate ('Will') 4 = 1	8 = V
eptible; 2 = Resistant)	
iensis) .38 90% 1.5 775 755	
865 (1969) USDA - 470 (1969)	
	er (Specify)
shurica)	
	2 = Medium Green ('Corsoy 79'; 'Braxton') 3 = White with purple throat 2 = Intermediate ('Amcor'; 'Braxton') 2 = Semi-Determinate ('Will') 4 = 1

19. DISEASE REACT	FION: (Enter 0 = Not Tested; 1 = Susceptible;	2 = Resistant) (Continued)		
FUNGAL DISE	ASES: (Continued)	,	-	9800326
★ 0 Pod and	Stem Blight <i>(Diaporthe phaseolorum</i> var; s <i>ojae</i>	,		
1 1	ed Stain (Cercospora kikuchii)		•	
	nia Root Rot (Rhizactonia solani)			
	hora Rot (Phytophthora megasperma var. sojac			
★ 0 Race 1	0 Race 2 0 Race 3	O Race 4 O Rac	ee 5 0 Race 6	I Race 7
VIRAL DISEASI	Suite Topechy,			
	t (Tobacco Ringspot Virus)		·	-
(-	
	osaic (Bean Yellow Mosaic Virus)			
· Compea W	osaic (Cowpea Chlorotic Virus)			-
,	e (Bean Pod Mottle Virus)		•	
★ 0 Seed Mottle	e (Soybean Mosaic Virus)			
NEMATODE DIS	EASES:			-
Soybean Cy	yst Nematode (Heterodera glycines)			
★ 1 Race 1	1 Race 2 1 Race 3 1	Race 4 Other	r (Specify)	
0 Lance Nema	atode (Hoplolaimus Colombus)			
★ O Southern Re	oot Knot Nematode (Meloidogyne incognita)			
	oot Knot Nematode (Meloidogyne Hapla)			
	t Knot Nematode (Meloidogyne arenaria)			
	ematode (Rotylenchulus reniformis)			
==	EASE NOT ON FORM (Specify):			
o o men bis	oran (apecity):			
20. PHYSIOLOGICAL RE	ESPONSES: (Enter 0 = Not Tested; 1 = Suscep	otible; 2 = Resistant)		
	is on Calcareous Soil	-		
0 Other (Specif	Гу I	AR 12 P.		
	(Enter 0 = Not Tested; 1 = Susceptible; 2 = R	C HW LO VO SA		_
			-	
0 Potato Leaf H	Beetle (Epilachna varivestis)	20 V - M 4 23 0		
	lopper (Empoasca fabae)	4:1		
				-
	RIETY MOST CLOSELY RESEMBLES THA	T SUBMITTED.		
CHARACTER Plant Shape	NAME OF VARIETY	CHARACTER	NAME OF	VARIETY
Leaf Shape	Proto	Seed Coat Luster	Ozzie	
Leaf Color	Proto	Seed Size	Lambert	
Leaf Size	Proto	Seed Shape		
	Proto	Seedling Pigmentation		
ORM LMGS-470-57 (6-83)				

	NO. OF	PLANT LODGING	CM PLANT HEIGHT	NDARD VARIETY: Paired Comparison Data				9800326	
VARIETY Norpro	DAYS MATURITY			LEAFLET SIZE		SEED CONTENT		SEED SIZE	NO.
				CM Width	CM Length	% Protein	% Oil	G/100 SEEDS	SEEDS/ POD
Submitted	125	2.0	84	6.4	13.3	44.6	16.8	20.1	2.1
TOTO Name of Similar Variety	128	2.3	76	7.0	13.1	45.5	16.5	19.0	2.1

LICATIONS OSEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

- 1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
- 2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
- 3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A2 in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
- 4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

USDA ACT CARE

REPRODUCE LOCALLY. Include form number and date on all reproductions.		FORM APPROVED - OMB NO: 0581-005				
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE The following statements are made in accordance to 1974 (5 U.S.C. 552a) and the Paperwork Reduction.						
EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to certificate is to be issued (7 U.S.C. until certificate is issued (7 U.S.C.	determine if a plant variety protection. 2421]. Information is held confidentia 2426].				
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME				
NDSU Research Foundation	OR EXPERIMENTAL NUMBER					
	ND92-1111	Norpro				
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	5. TELEPHONE Godesie and code!	0.544.5				
c/o Executive Director		6. FAX (include area code)				
P.O. Box 5014 Fargo, ND 58105-5014	701-231-8931	701-231-1013				
	7. PVPO NUMBER 9860326					
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate bl	act if an along applyin	·				
	our is the presse explain.	X YES NO				
		_				
9. Is the applicant findividual or company) a U.S. national or U.S. based company?		·				
If no, give name of country	-	X YES NO				
10. Is the applicant the original owner? X YES NO If no please any						
IN to a no, pease ans	wer the following:					
a. If original rights to variety were owned by individual(s), is (are) the	e original owner(s) a U.S. nation:	al(e)?				
YES NO If no, give name of country	- sugam como los a com macora	a(o, .				
	-	·				
b. If original rights to variety were owned by a company, is the original	nal owner(s) a U.S. based compa	ny?				
YES NO If no, give name of country						
11. Additional explanation on ownership (If needed, use reverse for extra space):						
See additional Exhibit E. Statement of the Basis included with this application.	of the Applicant's C	wnership				
		-				
PLEASE NOTE:						
Plant variety protection can be afforded only to owners (not licensees) who meet on	e of the following criteria:					
1. If the rights to the variety are owned by the original breeder, that person must be of a country which affords similar protection to nationals of the U.S. for the same	e a U.S. national, national of a U e genus and species.	IPOV member country, or national				
2. If the rights to the variety are owned by the company which employed the origin nationals of a UPOV member country, or owned by nationals of a country which genus and species.	al breeder(s), the company must affords similar protection to nat	be U.S. based, owned by ionals of the U.S. for the same				
3. If the applicant is an owner who is not the original owner, both the original owner	r and the applicant must meet o	ne of the above criteria.				
The original breeder/owner may be the individual or company who directed final bree for definition.	ding. See Section 41(a)(2) of the	ne Plant Variety Protection Act				
According to the Paperwork Reduction Act of 1995, no persons are required to rescontrol number. The valid OMB control number for this information collection is collection is estimated to average 10 minutes per response, including the time for and maintaining the data needed, and completing and reviewing the collection of information.	0581-0055. The time requireviewing instructions, searching	ired to complete this information				
The U.S. Department of Agriculture (USDA) prohibits discrimination in its program fisability, political beliefs, and marital or familial status. (Not all prohibited base alternative means for communication of program information (braille, large print, aud 11 (202) 720-5881 (voice) or (202) 720-7808 (TDD). To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.	ns on the basis of race, color, as apply to all programs. I Pers diotape, etc.) should contact the	cons with disabilities who require USDA Office of Communications				